



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/605,263

09/18/2003

Ralph William MacKenzie

70254-0397

2262

20915

7590

12/13/2007

MCGARRY BAIR PC

32 Market Ave. SW

SUITE 500

GRAND RAPIDS, MI 49503

EXAMINER

HONG, JOHN C

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

12/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/605,263	Applicant(s) MACKENZIE ET AL.	
	Examiner JOHN C. HONG	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-43, 83, 85 and 88-140 is/are pending in the application.
 4a) Of the above claim(s) 25-43, 85, 88, 89, 91 and 92 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 83, 90, 93-100, 110-113 and 117-140 is/are rejected.
 7) ☒ Claim(s) 101-109 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 83,90,93-140 in the reply filed on 9/10/07 is acknowledged.

2. The indicated allowability of claims 83 and 90 is withdrawn in view of the newly discovered reference(s) to Hahn (U.S. Patent 4496408) and Padovani (U.S. Patent 5453237).

Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 117-140 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 117, lines 8 and 9, the limitation "assembling the trimmed one of the at least one of the lid and closure tab to the **other** of the lid and closure tab" is not described in the specification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 93, 94 and 114-116 are rejected under 35 U.S.C. 102(b) as being anticipated by Hahn (U.S. Patent 4496408).

Hahn discloses : Regarding Claim(s) 93 and 94, an automated manufacturing line (Fig. 1) for making composite article from first (28) and second (26) thermoformed workpieces by automatically assembling the first thermoformed workpiece to the second thermoformed workpiece, comprising: a thermoforming station (16) for thermoforming the first and second thermoformed workpieces in a plastic sheet (12); a trim station (30) for individually trimming at least the first thermoformed workpiece from the plastic sheet; and an assembly station (32) for assembling the first and second thermoformed workpieces by press-fitting (col. 6, line 67- col. 7, line 16) the first and second thermoformed workpieces (Figs. 1,6, 8 and 9);

Regarding Claim(s) 114, an automated manufacturing line for making a composite article from first and second thermoformed workpieces by automatically assembling the first thermoformed workpiece to the second thermoformed workpiece, comprising: a thermoforming station for thermoforming the first and second thermoformed workpieces in a plastic sheet; a trim station for individually trimming at least the first thermoformed workpiece from the plastic sheet; and an assembly station for assembling the trimmed first thermoformed workpiece onto the second thermoformed workpiece to form the composite article by moving the trimmed first thermoformed workpiece directly from the trim station onto the second thermoformed workpiece without temporarily storing the trimmed first thermoformed workpiece prior to assembly to the second thermoformed workpiece (Figs. 1,6, 8 and 9);

Regarding Claim(s) 115, an automated manufacturing line for making a composite article from first and second thermoformed workpieces by automatically assembling the first thermoformed workpiece to the second thermoformed workpiece, comprising: a thermoforming station for thermoforming the first and second thermoformed workpieces in a plastic sheet comprising a portion of a web of plastic; a trim station for individually trimming at least the first thermoformed workpiece from the plastic sheet; and an assembly station for assembling the trimmed first thermoformed workpiece onto the second thermoformed workpiece to form the composite article (Figs. 1,6, 8 and 9);

Regarding Claim(s) 116, an automated manufacturing line for making a composite article from first and second thermoformed workpieces by automatically assembling the first thermoformed workpiece to the second thermoformed workpiece, comprising: a thermoforming station for thermoforming the first and second thermoformed workpieces in a plastic sheet; a trim station for individually trimming at least the first thermoformed workpiece from the plastic sheet; and an assembly station for assembling the trimmed first thermoformed workpiece onto the second thermoformed workpiece to form the composite article; wherein the sheet comprises opposing front and rear sides, and the trim station trims the first thermoformed workpiece from the front side, and the assembly station assembles the trimmed thermoformed workpiece onto the second thermoformed workpiece on the front side (Figs. 1,6, 8 and 9).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 83 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn (U.S. Patent 4496408) in view of Padova (U.S. Patent 5453237).

Regarding Claim(s) 90, Hahn teaches an automated manufacturing line for making a composite article from first and second thermoformed workpieces by automatically assembling the first thermoformed workpiece to the second thermoformed workpiece, comprising: a thermoforming station for thermoforming the first and second thermoformed workpieces in a plastic sheet; a trim station for trimming at least the first thermoformed workpiece from the plastic sheet; and an assembly station for assembling the trimmed first thermoformed workpiece onto the second thermoformed workpiece to form the composite article (Figs. 1, 6, 8 and 9).

Hahn fails to teach the plastic sheet comprises alternating one of rows and columns of the first thermoformed workpieces and the second thermoformed workpieces.

Padova teaches the plastic sheet comprises alternating one of rows and columns of the first thermoformed workpieces and the second thermoformed workpieces (Figs 16-19).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to employ the steps of alternating one of rows and columns of the first thermoformed workpieces and the second thermoformed workpieces, as taught by Padova on the manufacturing line of Hahn to produce more of the workpieces at a time.

Regarding Claim(s) 83, Padova teaches the assembly station comprises (26, 27) a carrier moveable relative to the alternating one of rows and columns between a first position, where it picks the trimmed first thermoformed workpiece (Fig 16).

9. Claims 96-100 and 110-113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn(U.S. Patent 4496408) in view of Padovani (U.S. Patent 5453237).

Regarding Claim(s) 96, Hahn teaches an automated manufacturing line for making a composite article from first and second thermoformed workpieces by automatically assembling the first thermoformed workpiece to the second thermoformed workpiece, comprising: a thermoforming station for thermoforming the first and second thermoformed workpieces in a plastic sheet; a trim station for individually trimming at least the first thermoformed workpiece from the plastic sheet; and an assembly station for assembling the trimmed first thermoformed workpiece onto the second thermoformed workpiece to form the composite article, where it assembles the trimmed first thermoformed workpiece to the second thermoformed workpiece (Figs. 1,6, 8 and 9).

Hahn fails to teach an assembly station comprising a carrier moveable between a first position, where it picks the trimmed first thermoformed workpiece, and a second position.

Padovani teaches an assembly station comprising a carrier (26,27) moveable between a first position, where it picks the trimmed first thermoformed workpiece, and a second position (Fig. 16).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize an assembly station comprising a carrier moveable between a first position, where it picks the trimmed first thermoformed workpiece, and a second position, as taught by Padovani on the manufacturing line of Hahn so as to increase the productivity without interrupting the process.

Regarding Claim(s) 97, Padovani teaches the carrier comprises a suction device (28) to pick the trimmed workpieces (Fig. 18).

Regarding Claim(s) 98, Padovani teaches the carrier comprises a force reliever to control the amount of force applied to the carrier. (Fig. 18; Col. 9, line 63-col. 10, line 5).

Regarding Claim(s) 99, Padovani teaches the carrier comprises a reciprocating arm (24,25) on an end of which the suction device is mounted on (Fig. 16).

Regarding Claim(s) 100, Padovani teaches the force reliever mounts the suction device to the end of the arm (Fig. 18).

Regarding Claim(s) 110, Padovani teaches the movement of the carriers between the first and second positions is either generally parallel or transverse to the machine direction as defined by the movement of the plastic sheet through the assembly station (Fig. 16 and 18).

Regarding Claim(s) 111-113, the limitations on the trim station comprises a 1st /2nd punch and die set for trimming the 1st /2nd thermoformed workpiece from the plastic sheets are well known in the art and It would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize these known devices on the apparatus of Hahn to effectively trim the thermoformed workpieces from the sheet.

Allowable Subject Matter

10. Claims 101-109 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims..

Application/Control Number:
10/605,263
Art Unit: 3726

Page 8

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN C. HONG whose telephone number is 571-272-4529. The examiner can normally be reached on M-F 9:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID BRYANT can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JOHN C HONG
Primary Examiner
Art Unit 3726

Jh
12/07/07